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Customer-Focused Solutions

October 27, 2004 TRC Project No. 41-0419

Mr. Craig Hunt
California Regional Water Quality Control Board
North Coast Region
5550 Skylane Boulevard
Santa Rosa, California 95403

SITE: GEORGIA PACIFIC FORMER SAWMILL SITE
90 WEST REDWOOD AVENUE
FORT BRAGG, CALIFORNIA

RE: ADDITIONAL SITE ASSESSMENT REPORT

Dear Mr. Hunt:

On behalf of Georgia Pacific Corporation (GP), TRC submits this Additional Site Assessment Report for the above referenced site. Assessment activities were performed in accordance with TRC's *Workplan for Additional Site Assessment*, dated June 23, 2004, which was approved by the Regional Water Quality Control Board (RWQCB) in a letter dated July 15, 2004. The workplan was prepared pursuant to recommendations for follow up assessment presented in TRC's *Phase I Environmental Site Assessment*, dated March 2004 (Phase I Report), and *Phase II Environmental Site Assessment*, dated May 14, 2004 (Phase II Report). Additional assessment activities were incorporated into this phase of work based on the RWQCB's comments letter dated August 12, 2004.

Please contact either Steve Kemnitz or myself at (925) 688-1200 if you have any questions or comments regarding this report.

Sincerely,

TRC

Mohammad Bazargani, P.E.
Associate

Steve Kemnitz
Project Scientist

cc: Ms. Julie Raming, Georgia Pacific

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ADDITIONAL SITE ASSESSMENT REPORT

GEORGIA PACIFIC FORMER SAWMILL SITE
90 West Redwood Avenue
Fort Bragg, California

Prepared For:

Georgia Pacific Corporation
133 Peachtree Street, NE
Atlanta, Georgia

By:

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Concord, California 94520

October 2004

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Customer-Focused Solutions

ADDITIONAL SITE ASSESSMENT REPORT

October 27, 2004

GEORGIA PACIFIC FORMER SAWMILL SITE
90 WEST REDWOOD AVENUE
FORT BRAGG, CALIFORNIA

TRC Project No. 41-0419-11

Prepared For:

Georgia Pacific Corporation
133 Peachtree Street, NE
Atlanta, Georgia

Prepared By:

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1.0 INTRODUCTION

On behalf of Georgia Pacific Corporation (GP), TRC submits this Additional Site Assessment Report for the GP Former Sawmill Site located at 90 West Redwood Avenue, in Fort Bragg, California. Assessment activities were performed in accordance with TRC's Workplan for Additional Site Assessment, dated June 23, 2004, which was approved by the Regional Water Quality Control Board (RWQCB) in a letter dated July 15, 2004. The workplan was prepared pursuant to recommendations for follow up assessment presented in TRC's *Phase I Environmental Site Assessment*, dated March 2004 (Phase I Report), and *Phase II Environmental Site Assessment*, dated May 14, 2004 (Phase II Report). Additional assessment activities were incorporated into this phase of work based on the RWQCB's comments letter dated August 12, 2004. Appendix A contains TRC's workplan and the RWQCB approval letter.

2.0 SCOPE OF WORK

The proposed scope of work for this phase of work at the Site involved the following:

- Completion of 14 potholes for the purpose of collecting soil samples from selected Site locations in Parcels 3, and 5 through 9
- Collect 4 surface soil samples at selected Site locations in Parcels 3 and 7.
- Upon the completion of demolition activities in Parcel 4, advance approximately four borings under the foundation of the Power House for the purpose of collecting soil samples and complete the assessment process in this area.
- Investigate subsurface anomaly near the Power House, identified during Phase II geophysical activities, through advancing a single pothole.
- Advance approximately two potholes for the purpose of investigating soils and subsurface anomalies in the Former Bunker Fuel AST Area now that the power lines have been inactivated.

In order to address specific comments received from the RWQCB additional field activities were added to the scope of work. Geophysical investigations were conducted at the former Scrap Yard Area (Parcel 3) and the Fill Material Area (Parcel 10) to investigate potential waste deposit areas. The geophysical survey areas were determined under the oversight of the RWQCB. Results of the geophysical investigation are enclosed in Appendix B.

Additional potholes were advanced in Parcels 3 (Former Compressor House and Former Scrap Yard Area), 4 (Power House), and 5 (Log Pond Fill Area) in order to further investigate potential waste deposit areas and/or delineate observed impacted soils.

3.0 ADDITIONAL SITE ASSESSMENT ACTIVITIES

3.1 POTHOLING AND SOIL SAMPLING ACTIVITIES

On July 20 and 21, 2004, 26 potholes were advanced using a backhoe in Parcels 3, 4, 5, 6, and 8 to depths ranging from 3.5 feet below grade (fbg) to 16 fbg. The locations of the potholes were based on Phase I recommendations, previous Phase II findings, field observations, and/or subsurface anomalies detected during Phase II geophysical activities. All potholing activities were performed under RWQCB oversight. Figure 2 shows pothole locations.

The following pothole locations (Figure 2) were added to the scope of work in order to further delineate observed impacted soils and address questions/comments by the RWQCB:

- 3 potholes near the Former Compressor House in Parcel 3
- 4 potholes in the Former Scrap Yard in Parcel 3 to define soil lithology and possible waste burial
- 1 pothole near the Power House in Parcel 4
- 5 potholes in the Log Pond Fill Area in Parcel 5

Based on field observations and previous soil lithology data collected from the Mill Ramp sample location, shallow soil sample P7-34 replaced the proposed pothole location in Parcel 7.

The lithology of the soil in each pothole was described in accordance with the Unified Soil Classification System (ASTM D-2487). Pothole logs area included in Appendix C

Pothole soil sample locations were determined based on field observations. Field geologists were instructed to note the presence of subsurface anomalies or soil impacts at each pothole location. If subsurface anomalies or soil impacts were not noted, the pothole was to be terminated, unless otherwise directed by the RWQCB. If subsurface anomalies or soil impacts were observed, soil samples were collected at and/or below the observed anomalies or impacts. Potholes were terminated once soil impacts were no longer observed, at groundwater interface, or at maximum equipment reach.

Due to the lack of observed subsurface anomalies or impacted soils, soil samples were not collected from 4 potholes (P3-PH12 through P3-PH15). These were advanced to investigate potential waste deposits in the Former Scrap Yard Area and to further delineate observed impacted soils at the Former Compressor House.

After sampling was completed, each pothole was backfilled with excavated soils.

3.2 SHALLOW SOIL SAMPLES

On July 20, 2004, 16 shallow soil samples were collected from 10 locations using a hand auger and/or backhoe in Parcels 3, 4, 7, and 9. Shallow soil sampling locations were based on previously detected elevated hydrocarbon concentrations limited to shallow soils, areas with

potential pesticide impacts, and areas within the Power House. As stated in Section 3.0, one additional shallow soil sampling location was added to the Scope of Work in Parcel 7 to replace a proposed pothole location. Soil sample locations are shown on Figure 2.

3.3 SOIL ANALYTICAL METHODOLOGY

Select soil samples were sent to Curtis and Tompkins Ltd. of Berkeley, California, under appropriate chain-of-custody protocol, for analysis. Laboratory reports and chain-of-custody documentation are included in Appendix D.

The following analyses were performed on select soil samples collected from Parcels 3 through 8:

- Total petroleum hydrocarbons as diesel with silica gel cleanup (TPH-D w/SGCU) (EPA Method 8015 Modified) – Extended Chromatogram.
- Toxicity Characteristic Leaching Procedure by deionized water for TPH-D (TCLP – DI for TPH-D) (EPA Method 1311)

The following analysis were performed for selected soil samples collected from within the Power House and one soil sample (P6-PH3) collected at the Planer No. 2 Building located in Parcels 4 and 6:

- Total petroleum hydrocarbons as diesel with silica gel cleanup (TPH-D w/SGCU) (EPA Method 8015 Modified) – Extended Chromatogram.
- Volatile Organic Compounds (VOCs) (EPA Method 8260) sample collection via EPA Method 5035)
- Polychlorinated Biphenyls (PCBs) (EPA Method 8080)
- Semi-Volatile Organic Compounds (SVOCs) (EPA Test Method 8270)
- CAM-17 Metals

Select soil samples collected from the Log Pond Fill Area, located in Parcel 5, were also analyzed for VOCs by EPA Method 5035.

Tebuthiuron and atrazine analyses (no EPA methods) were performed on selected samples collected from Parcel 9, by North Coast Laboratories of Arcata, California, a state-certified laboratory.

3.5 SURVEY

The locations of potholes and surface soil sample locations were surveyed by Doble Thomas and Associates, a state-licensed surveyor, in accordance with the State Plane Coordinate System.

4.0 ANALYTICAL RESULTS

This section discusses the analytical results of soil samples collected during additional site assessment activities. Analytical results of soil collected during this phase of work are presented in Tables 1 through 7.

4.1 PARCEL 3

As stated in Section 2.0 and 3.0, 2 shallow soil samples were collected from 1 location at the Former Mobile Equipment Shop Area (P3-80) and 10 potholes were advanced in the Former Scrap Yard (P3-PH10 through P3-PH13), Former Compressor House (P3-PH6 and P3-PH14 through P3-PH16), Machine Shop (P3-PH7), and Covered Shed (P3-PH8) Areas in Parcel 3. Based on field observations and questions/comments from the RWQCB, 7 pothole locations at the Former Compressor House and Former Scrap Yard Area were added to the Scope of Work. Twelve soil samples from Parcel 3 were submitted for analysis.

Former Mobile Equipment Shop
Concentrations of TPH-D and TPH-mo were detected in soil samples P3-80 @ 0.5 fbg (270 and 1,800 milligrams per kilogram [mg/kg], respectively) and P3-80 @ 2.5 fbg (910 and 5,100 mg/kg, respectively). TPH-D TCLP concentrations were also detected in soil samples P3-80 @ 0.5 fbg (99 micrograms per liter [µg/l]) and P3-80 @ 2.5 fbg (93 µg/l). TPH-mo TCLP concentrations were not detected at or above the laboratory detection limits, in soil samples collected from the Former Mobile Equipment Shop Area.

Former Scrap Yard
TPH-D and TPH-mo concentrations were detected in soil samples P3-PH10 @ 0.5 fbg (2.1 and 21 mg/kg, respectively) and P3-PH11 @ 0.5 fbg (2.4 and 16 mg/kg, respectively). TPH-D TCLP concentration of 76 µg/l was detected in soil sample P3-PH10 @ 0.5 fbg. TPH-mo TCLP concentration was detected in soil sample P3-PH11 @ 4.5 fbg (1,800 µg/l).

Former Compressor House
TPH-D concentrations ranged from 5.6 mg/kg (P3-PH6 @ 8 fbg) to 390 mg/kg (P3-PH6 @ 2.5 fbg). Detectable concentrations of TPH-mo ranged from 15 mg/kg (P3-PH6 @ 8 fbg) to 1,900 mg/kg (P3-PH16 @ 4 fbg). TPH-D TCLP concentrations were detected in soil samples P3-PH6 @ 2.5 (1,600 µg/l) and P3-PH16 @ 4 fbg (69 µg/l). TPH-mo TCLP concentrations were not detected at or above the laboratory detection limits, in soil samples collected from the Former Compressor House.

Machine Shop
Concentrations of TPH-D and TPH-mo were detected in soil sample P3-PH7 @ 2 fbg (80 and 200 mg/kg, respectively) and non-detect in the soil sample collected at 7 fbg. TPH-D TCLP concentration was also detected in soil samples P3-PH7 @ 2 fbg (150 µg/l). TPH-mo TCLP concentrations were not detected, at or above the laboratory detection limits, in soil samples collected from the Machine Shop.

Covered Shed
Concentrations of TPH-D were detected in soil samples P3-PH8 @ 2.5 fbg (19 mg/kg) and P3-PH8 @ 8 fbg (5.4 mg/kg). TPH-mo concentration was detected in soil sample P3-PH8 @ 2.5 fbg (70 mg/kg) and non-detect in the soil sample collected at 8 fbg. Concentrations of TPH-D TCLP and TPH-mo TCLP were not detected, at or above the laboratory detection limits, in soil samples collected from the Covered Shed.

4.2 PARCEL 4

As stated in Section 2.0 and 3.0, 5 shallow soil samples were collected from 4 locations within the Power House Building (P4-38 through P4-41) and 4 potholes were advanced at the Power House (P4-PH1 and P4-PH2) and Former Bunker Fuel AST (P4-PH3 and P4-PH4) Areas in Parcel 4. Based on observed soil impacts one pothole location at the Power House Area was added to the Scope of Work. Thirteen soil samples from Parcel 4 were submitted for analysis.

Power House
Concentrations of TPH-D ranged from 2.0 mg/kg (P4-PH2 @ 4 fbg) to 3,600 mg/kg (P4-PH1 @ 8 fbg). TPH-D TCLP concentration was detected in soil sample P4-PH2 @ 4 fbg (84 µg/l). Concentrations of TPH-mo ranged from 9.4 mg/kg (P4-PH2 @ 4 fbg) to 9,600 mg/kg (P4-PH1 @ 8 fbg). TPH-mo TCLP concentrations were not detected at or above the laboratory detection limits, in soil samples collected from the Power House Area.

EPA Method 8260 detected the following VOCs in soil samples collected from the Power House area of Parcel 4:

- Acetone: 0.026 mg/kg (P4-38 @ 0.5 fbg)
- Methylene Chloride: 0.020 mg/kg (P4-39 @ 0.5 fbg) to 0.27 mg/kg (P4-38 @ 2.5 fbg)

Naphthalene was detected, by EPA Method 5035, in soil sample P4-PH1 @ 5fbg (0.12 mg/kg). VOCs, by EPA Method 5035, were not detected at or above laboratory detection limits in the remainder of soil samples collected from Parcel 4.

SVOCs were detected in soil sample P4-38 @ 0.5 fbg containing concentrations of benzo(b)fluoranthene (0.12 mg/kg), bis(2-ethylhexyl)phthalate (1.4 mg/kg), and butylbenzylphthalate (0.38 mg/kg). Concentrations of benzo(b)fluoranthene were also detected in soil sample P4-41 @ 0.5 fbg (0.11 mg/kg). SVOCs were not detected, at or above laboratory detection limits in the remainder of the samples collected from Parcel 4.

Detectable concentrations of VOCs, SVOCs, and metals are below the conservative EPA Region 9 Preliminary Remediation Goals (PRGs) which are often used as a screening measure of site cleanup.

Additionally, detectable concentrations of metals in soil samples collected from the Power House appear to be consistent with the findings identified in this region in the U.S. Geological Survey

Professional Paper 1648 (2001), "Geochemical Landscapes of the Conterminous United States – New Map Presentations for 22 Elements".

PCBs concentrations were not detected at or above the laboratory detection limits, in soil samples collected from the Power House Area.

Former Bunker Fuel AST

TPH-D concentrations ranged from 2.5 mg/kg (P4-PH3 @ 9.5 fbg) to 18 mg/kg (P4-PH4 @ 9 fbg). Concentrations of TPH-mo were detected in soil samples P4-PH3 @ 2 fbg (35 mg/kg) and P4-PH4 @ 2 fbg (5.4 mg/kg). TPH-D TCLP concentrations ranged from 61 µg/l (P4-PH4 @ 9 fbg) to 200 µg/l (P4-PH4 @ 2 fbg). TPH-mo TCLP concentrations were not detected at or above the laboratory detection limits.

4.3 PARCEL 5

As stated in Section 2.0 and 3.0, 8 potholes were advanced at the Log Pond Fill Area - East (P5-PH1 and P5-PH4 through P5-PH8) and Mobile Equipment Shop (P5-PH2 and P5-PH3) in Parcel 5. Based on observed soil impacts, 5 pothole locations at the Log Pond Fill Area were added to the Scope of Work. Nineteen soil samples from Parcel 5 were submitted for analysis.

Log Pond Fill Area – East

Concentrations of TPH-D ranged from 2.0 mg/kg (P5-PH7 @ 8.5 fbg) to 24,000 mg/kg (P5-PH6 @ 2.5 fbg). TPH-D TCLP concentrations ranged from 64 µg/l (P5-PH8 @ 10 fbg) to 1,300 µg/l (P5-PH6 @ 2.5 fbg). Concentrations of TPH-mo ranged from 5.6 mg/kg (P5-PH7 @ 7.5 fbg) to 480 mg/kg (P5-PH6 @ 2.5 fbg). TPH-mo TCLP was not detected at or above laboratory detection limits.

EPA Method 5035 detected the following VOCs:

- 1,2,4-Trimethylbenzene: 9.0 mg/kg (P5-PH5 @ 4 fbg)
- 1,3,5-Trimethylbenzene: 1.5 mg/kg (P5-PH5 @ 4 fbg)
- Ethylbenzene: 2.3 mg/kg (P5-PH5 @ 4 fbg)
- Isopropylbenzene: 1.8 mg/kg (P5-PH5 @ 4 fbg)
- m,p-Xylenes: 1.7 mg/kg (P5-PH5 @ 4 fbg)
- n-Butylbenzene: 0.23 mg/kg (P5-PH5 @ 12 fbg) to 3.9 mg/kg (P5-PH5 @ 4 fbg)
- Naphthalene: 0.64 mg/kg (P5-PH5 @ 12 fbg) to 12.0 mg/kg (P5-PH5 @ 4 fbg)
- Propylbenzene: 0.18 mg/kg (P5-PH5 @ 12 fbg) and 3.0 mg/kg (P5-PH5 @ 4 fbg)
- p-Isopropyltoluene: 1.7 mg/kg (P5-PH5 @ 4 fbg)
- sec-Butylbenzene: 0.16 mg/kg (P5-PH5 @ 12 fbg) to 2.4 mg/kg (P5-PH5 @ 4 fbg)

Detectable concentrations of VOCs are below the conservative EPA Region 9 PRGs, which are often used as a screening measure of site cleanup.

Mobile Equipment Shop
Concentrations of TPH-D were detected in soil samples P5-PH3 @ 2 fbg (8.5 mg/kg), P5-PH3 @ 8 fbg (2,800 mg/kg), and @ 14.5 fbg it was non-detect. TPH-mo concentration was detected in soil sample P5-PH3 @ 2 fbg (13 mg/kg), while underlying soil samples were non-detect. Concentrations of TPH-D TCLP were detected in soil samples P5-PH3 @ 8 fbg (1,600 µg/l) and P5-PH3 @ 14.5 fbg (88 µg/l). TPH-mo TCLP was not detected at or above laboratory detection limits, in soil samples collected from the Mobile Equipment Shop. Soil samples collected at 4 and 9 fbg in P5-PH2 were non-detect for all of the analyses performed.

4.4 PARCEL 6

As stated in Section 2.0 and 3.0, 3 potholes were advanced at the Log Pond Fill Area – West (P6-PH2) and Planer No. 2 Building (P6-PH1 and P6-PH3) in Parcel 6. Six soil samples from Parcel 6 were submitted for analysis.

Log Pond Fill Area – West
TPH-D and TPH-mo concentrations were detected in soil samples P6-PH2 @ 4 fbg (81 and 390 mg/kg, respectively) and P6-PH2 @ 10 fbg (11 and 38 mg/kg, respectively). Concentration of TPH-D TCLP was detected in soil sample P6-PH2 @ 10 fbg (120 µg/l). TPH-mo TCLP was not detected at or above the laboratory detection limit, in the soil samples collected from the Log Pond Fill Area.

Planer No. 2 Building
TPH-D concentrations were detected in soil samples P6-PH3 @ 1.5 fbg (290 mg/kg) and P6-PH3 @ 8 fbg (45 mg/kg). Samples P6-PH1 @ 3.5 and 11 fbg were non-detect. Concentration of TPH-mo was detected in soil sample P6-PH3 @ 1.5 fbg (4,600 mg/kg) and non-detect @ 8 fbg. TPH-D TCLP concentrations were detected in soil samples P6-PH1 @ 3.5 fbg (83 µg/l) and P6-PH3 @ 8 fbg (440 µg/l). TPH-mo TCLP was not detected at or above the laboratory detection limit, in the soil samples collected from the Log Pond Fill Area.

Elevated concentrations of acetone and Methylene chloride were detected by EPA Method 8260, in soil samples P6-PH3 @ 1.5 fbg (0.082 and 0.38 mg/kg, respectively) and P6-PH3 @ 8 fbg (0.080 mg/kg and 0.21 mg/kg, respectively).

Detectable concentrations of VOCs and metals are below the conservative EPA Region 9 PRGs, which are often used as a screening measure of site cleanup.

Additionally, detectable concentrations of metals in soil samples collected from Planer No. 2 Building appear to be consistent with the findings identified in this region in the U.S. Geological Survey Professional Paper 1648 (2001), "Geochemical Landscapes of the Conterminous United States – New Map Presentations for 22 Elements".

TPH-mo TCLP concentrations were not detected at or above the laboratory detection limit, in the soil samples collected from the Planer No. 2 Building. PCBs were not detected at or above the laboratory detection limit in P6-PH3.

4.7 PARCEL 7

As stated in Section 2.0 and 3.0, 3 shallow soil samples were collected and submitted for analysis, from 2 locations at the Sawmill No. 2 Building (P7-33) and Mill Ramp Area (P7-34), in Parcel 7.

Sawmill No. 2 Building
Concentrations of TPH-D and TPH-mo were detected in soil samples P7-33 @ 0.5 fbg (37 and 110 mg/kg, respectively) and P7-33 @ 3.5 fbg (77 and 260 mg/kg, respectively). TPH-D TCLP was detected in soil sample P7-33 @ 0.5 fbg (93 µg/l). TPH-mo TCLP was not detected at or above the laboratory detection limit, in soil samples collected from the Sawmill No. 2 Building.

Mill Ramp Area
Concentrations of TPH-D and TPH-mo were detected in soil sample P7-34 @ 5 fbg (36 and 140 mg/kg, respectively). TPH-D TCLP was also detected in soil sample P7-34 @ 5 fbg (76 µg/l). TPH-mo TCLP was not detected at or above the laboratory detection limit, in the soil sample collected from the Mill Ramp Area.

4.8 PARCEL 8

As stated in Section 2.0, 1 pothole was advanced at the Coastal Disturbance Area (P8-PH6) in Parcel 8. Two soil samples were submitted for analysis.

TPH-D and TPH-mo concentrations were detected in soil samples P8-PH6 @ 2 fbg (4.8 and 21 mg/kg, respectively) and P8-PH6 @ 16 fbg (11 and 21 mg/kg, respectively). Concentrations of TPH-D TCLP were detected in samples P8-PH6 @ 2 fbg (79 µg/l) and P8-PH6 @ 16 fbg (60 µg/l). TPH-mo TCLP was not detected at or above laboratory detection limits, in soil samples collected from Parcel 8.

4.9 PARCEL 9 (FORMER NURSERY)

As stated in Section 2.0, 6 soil samples were collected @ 0.5 and 4 fbg and submitted for analysis from 3 locations, at the Former Nursery Building (P9-20 through P9-22), in Parcel 9.

Concentrations of tebuthiuron and atrazine were not detected at or above laboratory detection limits, in the soil samples collected from Parcel 9.

5.0 GEOPHYSICAL INVESTIGATION

On August 17 through 18, 2004, 3Dgeophysical.com (3Dg) performed a geophysical investigation on two portions of the GP Fort Bragg Sawmill Site. The work was conducted on 4.3 acres in the Former Scrap Yard Area of Parcel 3 and 6.7 acres in the Fill Material Area of Parcel 10. The purpose of the investigation was to investigate potential waste deposit areas. A copy of the

geophysical survey investigation report is provided in Appendix C. Please reference this report for specific locations of any anomalies located.

The geophysical investigation conducted on each area consisted of an EM61 metal detector survey and an EM31 ground conductivity survey.

5.1 PARCEL 3

Many anomalies were detected in the western portion of the Former Scrap Yard Area. The size and intensity of the detected objects does not suggest that extremely large metal objects are buried at the site. The conductivity of the near surface sediments is uniform across the study area, which indicates that no reworked soil or fill areas are present. According to 3Dg, based on the ground conductivity data which suggests no significant ground conductivity changes near the metal detector anomalies, the anomalies mapped in the survey area probably represent smaller metal objects such as debris that are located on the surface of the site or buried at a shallow depth.

5.2 PARCEL 10

Several metal detector anomalies were detected in the Fill Material Area. According to 3Dg, the size and intensity of the anomalies suggests that the anomalies represent buried objects. The ground conductivity survey data suggests that different sediment types, fill, or reworked soil are also located within the area of investigation.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the data obtained during current site assessment activities, the following conclusions were made:

- During recent assessment activities, detectable concentrations of metals, VOCs, and SVOCs were found to be present. However, they were below the conservative EPA Region 9 PRGs, which are often used as a screening measure of site cleanup. Additionally, detectable concentrations of metals in soil samples appear to be consistent with the findings identified in this region in the U.S. Geological Survey Professional Paper 1648 (2001), "Geochemical Landscapes of the Conterminous United States – New Map Presentations for 22 Elements".

- Elevated petroleum hydrocarbon TCLP concentrations were detected at the Former Scrap Yard Area in Parcel 3, the Former Compressor House area of Parcel 3, the Machine Shop in Parcel 3, the Former Bunker Fuel AST Area in Parcel 4, the Log Pond Fill Area in Parcel 5, the Mobile Equipment Shop Area of Parcel 5, and northwest of the Planer No. 2 Building in Parcel 6. This analysis was performed to assess whether the contaminates present had the potential to leach into the groundwater.

- Geophysical investigation results indicate the presence of isolated buried metal objects and fill or reworked soils in the Fill Material Area of Parcel 10. Additionally, the investigation detected small subsurface metal anomalies in the western portion of the Former Scrap Yard Area located in Parcel 3.

Based on the data obtained during site assessment activities, the following recommendations are made:

- Advance additional potholes at locations identified as containing subsurface anomalies in Parcels 3 and 10.

7.0 REFERENCES

3Dgeophysics.com, 2004, Geophysical Investigation at Parcels 3 and 10 of the Former Georgia Pacific Sawmill Site in Fort Bragg, California. Final Report. September 1.

California Regional Water Quality Control Board, Letter, 2004. Site Assessment Comments for Portions of the Site, Georgia-Pacific Fort Bragg Sawmill, August 12.

California Regional Water Quality Control Board, Letter, 2004. Workplan for Additional Site Assessment, Georgia Pacific Fort Bragg Sawmill, 90 West Redwood Avenue, Fort Bragg, Case No. 1NMC462. July 15.

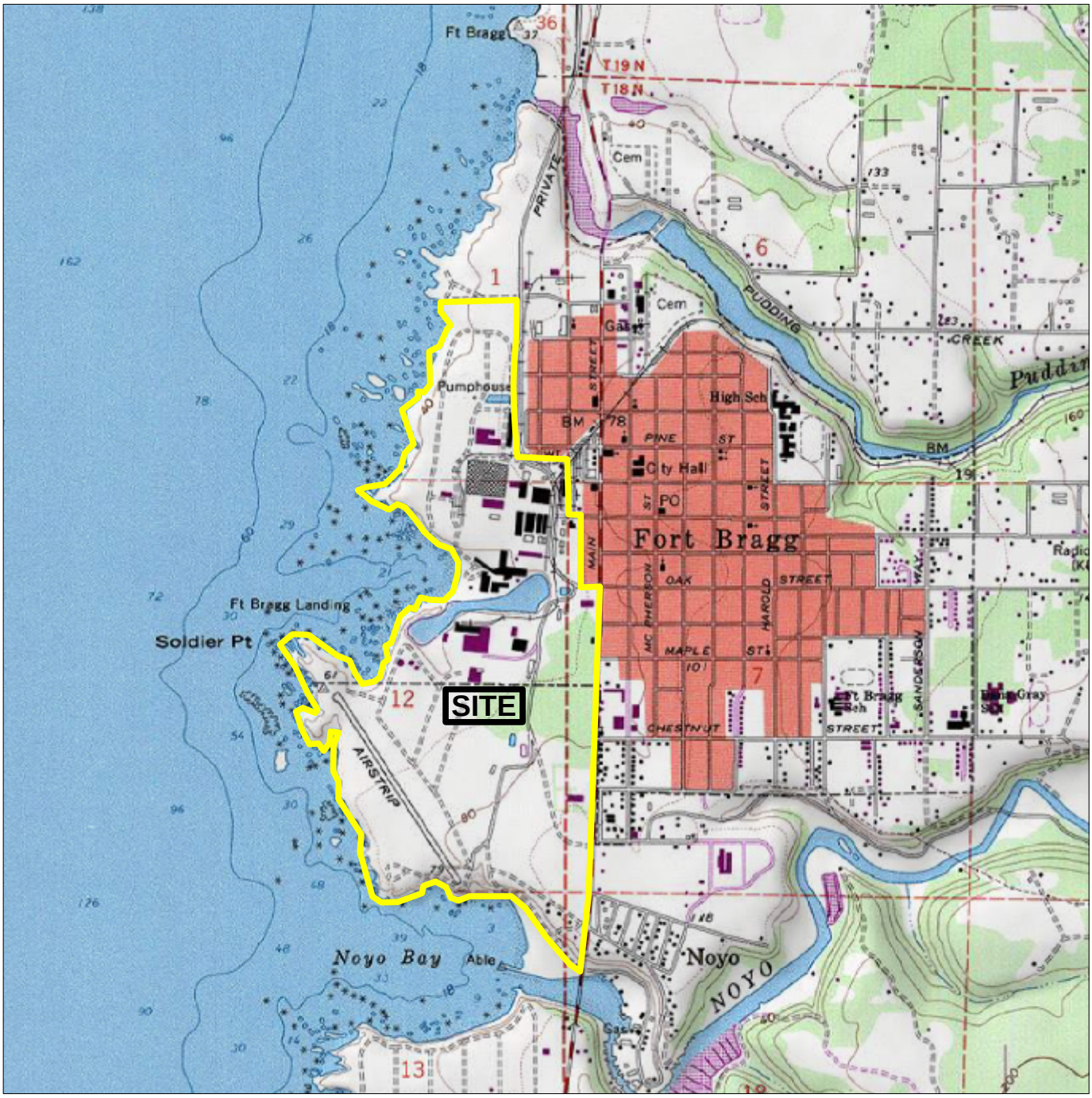
Gustavsson, B., Bloviken, D.B. Smith, and R.C. Severson, 2001, Geochemical Landscapes of the Conterminous United States – New Map Presentations for 22 Elements: U.S. Geological Survey, Professional Paper 1648.

TRC, 2004. Phase I Environmental Site Assessment. Georgia-Pacific California Woods Products and Manufacturing Division, 90 West Redwood Avenue, Fort Bragg, California. March 2004.

TRC, 2004. Phase II Environmental Site Assessment Report. Georgia-Pacific California Woods Products and Manufacturing Division, 90 West Redwood Avenue, Fort Bragg, California. May 2004.

TRC, 2004. Workplan for Additional Site Assessment. Georgia-Pacific Former Sawmill, 90 West Redwood Avenue, Fort Bragg, California. June 23.

FIGURES



APPROXIMATE SCALE (FEET)

0 2,000 4,000

LEGEND

Approximate site boundary

N

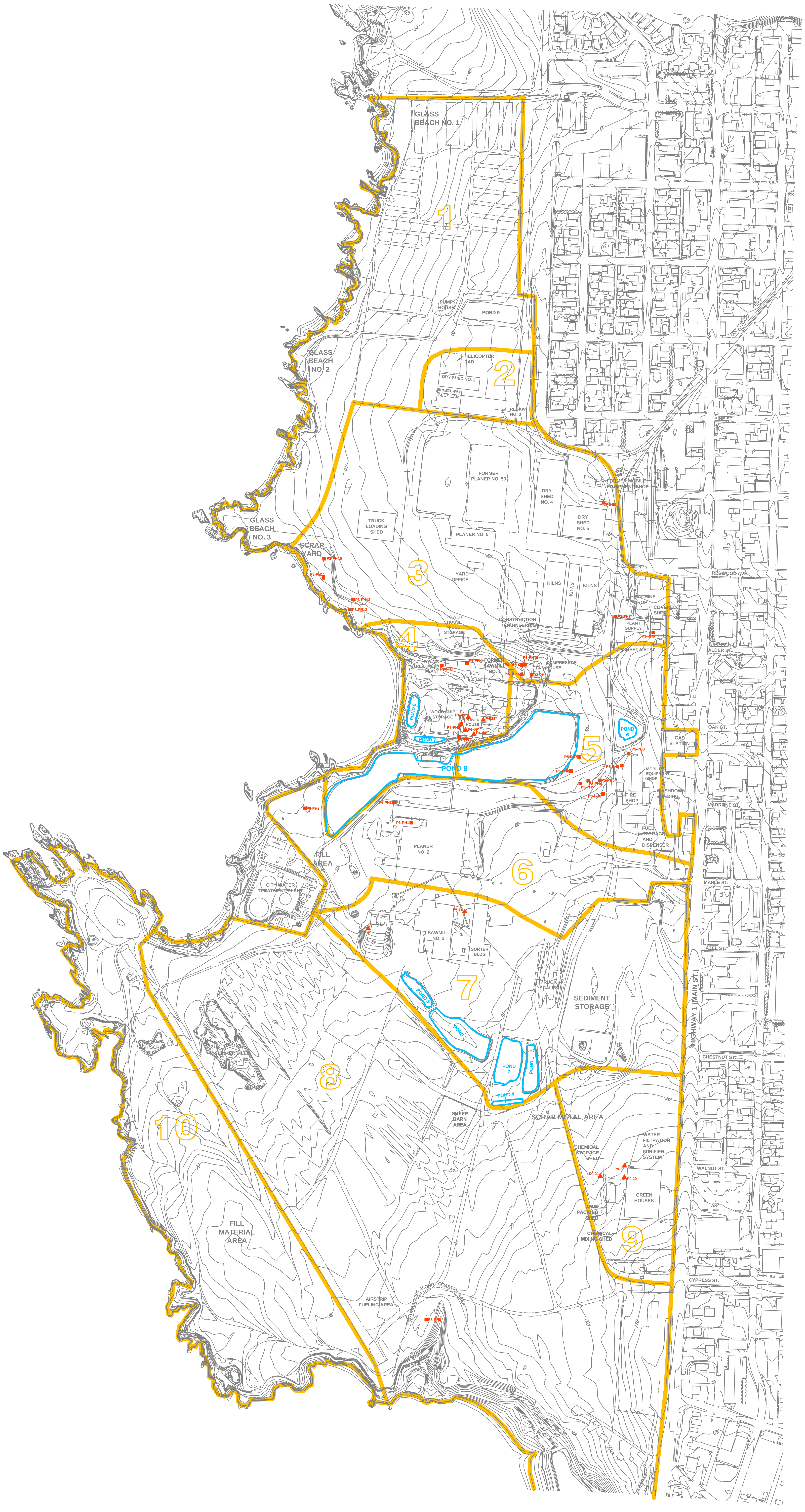
SOURCE:
National Geographic
USGS Topographic Maps on CD-ROM:
Fort Bragg Quadrangle

VICINITY MAP

Georgia-Pacific
Former Sawmill Site
90 West Redwood Avenue
Fort Bragg, California

TRC

FIGURE 1



LEGEND

■ Pothole
TRC, July 2004

▲ Sample Point
TRC, July 2004

NOTE: * = Not surveyed.

N

GRAPHICAL SCALE (FEET)
0 300 600 900 1,200

POTHOLE AND SAMPLING LOCATIONS
July 20-21, 2004

Georgia-Pacific
Former Sawmill Site
90 West Redwood Avenue
Fort Bragg, California

TRC

FIGURE 2

..\...\fort bragg\meeting...sept04\fig2_pothole and sampling locations.dwg

TABLES

Table 1
Soil Analytical Results - Petroleum Hydrocarbons
Georgia Pacific
Fort Bragg, California

Sample ID	Depth (ft.)	Date	TPH-D w/silica gel cleanup (mg/kg)	TPH-D TCLP w/silica gel cleanup (ug/L)	TPH-MO w/silica gel cleanup (mg/kg)	TPH-MO TCLP w/silica gel cleanup (ug/L)
P3-80	0.5	07/21/04	270	99	1,800	<300
P3-80	2.5	07/21/04	910	93	5,100	<300
P3-PH6	2.5	07/21/04	390	1,600	1,100	<300
P3-PH6	8	07/21/04	5.6	<60	15	<300
P3-PH7	2	07/21/04	80	150	200	<300
P3-PH7	7	07/21/04	<1.0	<60	<5.0	<300
P3-PH8	2.5	07/21/04	19	<60	70	<300
P3-PH8	8	07/21/04	5.4	<60	<5.0	<300
P3-PH10	0.5	07/21/04	2.1	76	21	<300
P3-PH11	0.5	07/21/04	2.4	<60	16	<300
P3-PH11	4.5	07/21/04	<1.0	<60	<5.0	1,800
P3-PH16	4	07/21/04	310	69	1,900	<300
P4-38	0.5	07/20/04	410	--	1,600	--
P4-38	2.5	07/20/04	91	--	320	--
P4-39	0.5	07/20/04	5.6	--	35	--
P4-40	1	07/20/04	4.1	--	14	--
P4-41	0.5	07/20/04	42	--	120	--
P4-PH1	5	07/20/04	55	<60	350	<300
P4-PH1	8	07/20/04	3,600	<60	9,600	<300
P4-PH2	2	07/20/04	74	<60	340	<300
P4-PH2	4	07/20/04	2	84	9.4	<300
P4-PH3	2	07/21/04	5.8	<60	35	<300
P4-PH3	9.5	07/21/04	2.5	120	<5.0	<300
P4-PH4	2	07/21/04	<1.0	200	5.4	<300

Table 1
Soil Analytical Results - Petroleum Hydrocarbons
Georgia Pacific
Fort Bragg, California

Sample ID	Depth (ft.)	Date	TPH-D w/silica gel cleanup (mg/kg)	TPH-D TCLP w/silica gel cleanup (ug/L)	TPH-MO w/silica gel cleanup (mg/kg)	TPH-MO TCLP w/silica gel cleanup (ug/L)
P4-PH4	9	07/21/04	18	61	<5.0	<300
P5-PH-1	2	07/20/04	210	110	250	<300
P5-PH-1	6	07/20/04	<1.0	<60	<5.0	<300
P5-PH-1	9	07/20/04	160	220	<5.0	<300
P5-PH1	11	07/20/04	<0.99	260	<5.0	<300
P5-PH2	4	07/20/04	<1.0	<60	<5.0	<300
P5-PH2	9	07/21/04	<1.0	<60	<5.0	<300
P5-PH3	2	07/21/04	8.5	<60	13	<300
P5-PH3	8	07/21/04	2,800	1,600	<500	<300
P5-PH3	14.5	07/21/04	<1.0	88	<5.0	<300
P5-PH4	5	07/20/04	3,200	500	<250	<300
P5-PH4	8	07/20/04	1,400	430	41	<300
P5-PH5	4	07/20/04	8,800	1,100	200	<300
P5-PH5	12	07/20/04	2,400	550	<50	<300
P5-PH6	2.5	07/20/04	24,000	1,300	480	<300
P5-PH7	7.5	07/20/04	2.2	73	5.6	<300
P5-PH7	8.5	07/20/04	2.0	120	<5.0	<300
P5-PH8	5	07/20/04	21	<60	61	<300
P5-PH8	7	07/20/04	46	510	7.9	<300
P5-PH8	10	07/20/04	<1.0	64	<5.0	<300
P6-PH1	3.5	07/21/04	<1.0	83	<5.0	<300
P6-PH1	11	07/21/04	<1.0	<60	<5.0	<300
P6-PH2	4	07/20/04	81	<60	390	<300
P6-PH2	10	07/20/04	11	120	38	<300

Table 1
Soil Analytical Results - Petroleum Hydrocarbons
Georgia Pacific
Fort Bragg, California

Sample ID	Depth (ft.)	Date	TPH-D w/silica gel cleanup (mg/kg)	TPH-D TCLP w/silica gel cleanup (ug/L)	TPH-MO w/silica gel cleanup (mg/kg)	TPH-MO TCLP w/silica gel cleanup (ug/L)
P6-PH3	1.5	07/21/04	290	<60	4,600	<300
P6-PH3	8	07/21/04	45	440	<5.0	<300
P7-33	0.5	07/20/04	37	93	110	<300
P7-33	3.5	07/20/04	77	<60	260	<300
P7-34	5	07/20/04	36	76	140	<300
P8-PH6	2	07/20/04	4.8	79	21	<300
P8-PH6	16	07/20/04	11	60	21	<300
DUP-1	--	07/20/04	44	140	160	<300
DUP-2	--	07/20/04	19	310	5.3	<300

Notes:

mg/kg = milligrams per kilograms
ug/L = micrograms per liter
TPH-D = total petroleum hydrocarbons as diesel
TPH-MO = total petroleum hydrocarbons as motor oil
TCLP = toxicity characteristic leaching procedure
< = analyte not detected at or above stated laboratory detection limit

Table 2
Soil Analytical Results - VOCs by 8260 (mg/kg)
Georgia Pacific
Fort Bragg, California

Sample ID	Depth (ft.)	Date	1,1,1,2-PCE	1,1,1-TCA	1,1,2,2-PCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-DB-3-chloro-propane	1,2-Dibromo-ethane	1,2-DCB	1,2-DCA	1,2 DCPA	1,3,5-Trimethyl-benzene	1,3-DCB	1,3-DCPA	1,4-DCB	2,2-DCPA	MEK	2-Chloro-toluene	2-Hexan-one	4-Chloro-toluene	MIBK	ACT	Benzene	Bromo-benzene	Bromo-chloro-methane	Bromodichloromethane	Bromo-form	Bromomethane	Carbon Disulfide	Chlorobenzene	Chloroethane	Chloromethane
P4-38	0.5	07/20/04	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0094	<0.0047	<0.0094	<0.0047	<0.0094	**0.026**	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0094	<0.0047	<0.0047	<0.0094	<0.0094
P4-38	2.5	07/20/04	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0046	<0.0093	<0.0046	<0.0093	<0.019	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0046	<0.0046	<0.0093	<0.0093
P4-39	0.5	07/20/04	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	<0.0096	<0.0048	<0.0096	<0.019	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	<0.0048	<0.0096	<0.0096
P4-40	1	07/20/04	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0094	<0.0047	<0.0094	<0.0047	<0.0094	<0.019	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0094	<0.0047	<0.0047	<0.0094	<0.0094
P4-41	0.5	07/20/04	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	<0.0098	<0.0049	<0.0098	<0.020	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	<0.0049	<0.0098	<0.0098
P6-PH3	1.5	07/21/04	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	<0.0096	<0.0048	<0.0096	**0.082**	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	<0.0048	<0.0096	<0.0096
P6-PH3	8	07/21/04	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0046	<0.0093	<0.0046	<0.0093	**0.080**	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0046	<0.0046	<0.0093	<0.0093

Table 2
Soil Analytical Results - VOCs by 8260 (mg/kg)
Georgia Pacific
Fort Bragg, California

Sample ID	Depth (ft.)	Date	CT	TCM	cis-1,2-DCE	cis-1,3-DCPE	Dibromochloromethane	Dibromo-methane	Dichlorodifluoromethane	Ethylbenzene	Freon 12	Freon 113	Hexa-chloro-butadiene	Isopropyl-benzene	m,p-Xylene	Methyl tert-butyl ether	DCM	n-Butyl-benzene	n-Propyl-benzene	NP	o-Xylene	p-Isopropyl-toluene	sec-Butyl-benzene	Styrene	tert-Butyl-benzene	PCE	Toluene	trans-1,2-DCE	trans-1,3-DCPE	TCE	Trichlorofluoromethane	Vinyl Acetate	VC
P4-38	0.5	07/20/04	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0094	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.019	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.047	<0.0094
P4-38	2.5	07/20/04	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	**0.27**	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.046	<0.0093
P4-39	0.5	07/20/04	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.020**	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.048	<0.0096
P4-40	1	07/20/04	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0094	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.019	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.0047	<0.047	<0.0094
P4-41	0.5	07/20/04	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0098	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	**0.076**	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.0049	<0.049	<0.0098
P6-PH3	1.5	07/21/04	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0096	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**0.38**	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	<0.048	<0.0096
P6-PH3	8	07/21/04	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	**0.21**	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.046	<0.0093

Notes:

VC = vinyl chloride
ACT = acetone
DCE = dichloroethene
DCM = dichloromethane (methylene chloride)
DCA = dichloroethane
TCM = trichloromethane (chloroform)
CT = carbon tetrachloride
TCE = trichlorothene
NP = naphthanlene
< = analyte not detected at or above stated laboratory detection limit

PCE = tetrachloroethene
DCB = dichlorobenzene
DCPA = dichloropropane
DCPE = dichloropropene
TCA = trichloroethane
MEK = 2-butanone
MIBK = 4-methyl-2-pentanone
VOCs = volatile organic compounds
mg/kg = milligrams per kilogram

Table 3
Soil Analytical Results - VOCs by 5035 (mg/kg)
Georgia Pacific
Fort Bragg, California

Sample ID	Depth (ft.)	Date	1,1,1,2-PCE	1,1,1-TCA	1,1,2,2-PCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,1-Dichloro-propene	1,2,3-Trichloro-benzene	1,2,3-Trichloro-propane	1,2,4-Trichloro-benzene	1,2,4-Trimethyl-benzene	1,2-DB-3-chloro-propane	1,2-Dibromo-ethane	1,2-DCB	1,2-DCA	1,2 DCPA	1,3,5-Trimethyl-benzene	1,3-DCB	1,3-DCPA	1,4-DCB	2,2-DCPA	MEK	2-Chloro-toluene	2-Hexan-one	4-Chloro-toluene	MIBK	ACT	Benzene	Bromo-benzene	Bromo-chloro-methane	Bromodichloromethane	Bromo-form	Bromomethane	Carbon Disulfide	Chlorobenzen	Chloroethane	Chloromethane
P4-38	1	07/20/04	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.014	<0.0068	<0.014	<0.0068	<0.014	<0.027	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.014	<0.0068	<0.0068	<0.014	<0.014
P4-38	2.5	07/20/04	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.010	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.010	<0.010
P4-39	0.5	07/20/04	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.013	<0.0064	<0.013	<0.0064	<0.013	<0.026	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.013	<0.0064	<0.0064	<0.013	<0.013
P4-41	0.5	07/20/04	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0046	<0.0093	<0.0046	<0.0093	<0.019	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0046	<0.0046	<0.0093	<0.0093
P4-41	1	07/20/04	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.013	<0.0063	<0.013	<0.0063	<0.013	<0.025	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.013	<0.0063	<0.0063	<0.013	<0.013
P4-PH1	5	07/20/04	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.021	<0.010	<0.021	<0.010	<0.021	<0.042	<0.010	<0.010	<0.010	<0.010	<0.010	<0.021	<0.010	<0.010	<0.021	<0.021
P4-PH2	2	07/20/04	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.017	<0.0086	<0.017	<0.0086	<0.017	<0.034	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.017	<0.0086	<0.0086	<0.017	<0.017
P5-PH1	10	07/20/04	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<0.50	<1.0	<2.0	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<1.0	<1.0
P5-PH4	8	07/20/04	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<0.25	<0.50	<0.25	<0.50	<1.0	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<0.25	<0.25	<0.50	<0.50
P5-PH5	4	07/20/04	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	**9.0**	<1.3	<1.3	<1.3	<1.3	<1.3	**1.5**	<1.3	<1.3	<1.3	<1.3	<2.5	<1.3	<2.5	<1.3	<2.5	<5.0	<1.3	<1.3	<1.3	<1.3	<1.3	<2.5	<1.3	<1.3	<2.5	<2.5
P5-PH5	12	07/20/04	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.25	<0.13	<0.25	<0.13	<0.25	<0.50	<0.13	<0.13	<0.13	<0.13	<0.13	<0.25	<0.13	<0.13	<0.25	<0.25

Table 3
Soil Analytical Results - VOCs by 5035 (mg/kg)
Georgia Pacific
Fort Bragg, California

Sample ID	Depth (ft.)	Date	CT	TCM	cis-1,2-DCE	cis-1,3-DCPE	Dibromochloromethane	Dibromo-methane	Dichlorodifluoromethane	Ethylbenzene	Freon 12	Freon 113	Hexa-chloro-butadiene	Isopropyl-benzene	m,p-Xylene	Methyl tert-butyl ether	DCM	n-Butyl-benzene	n-Propyl-benzene	NP	o-Xylene	Propylbenzen	p-Isopropyl toluene	sec-Butyl-benzene	Styrene	tert-Butyl-benzene	PCE	Toluene	trans-1,2-DCE	trans-1,3-DCPE	TCE	Trichlorofluoromethane	Vinyl Acetate	VC
P4-38	1	07/20/04	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.014	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.027	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068	<0.068	<0.014
P4-38	2.5	07/20/04	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.010
P4-39	0.5	07/20/04	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.013	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.026	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.064	<0.013
P4-41	0.5	07/20/04	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0093	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.019	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.0046	<0.046	<0.0093
P4-41	1	07/20/04	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.013	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.025	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.063	<0.013
P4-PH1	5	07/20/04	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.021	<0.010	<0.010	<0.010	<0.010	<0.010	<0.042	<0.010	<0.010	**0.12**	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.10	<0.021
P4-PH2	2	07/20/04	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.017	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.034	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.0086	<0.086	<0.017
P5-PH1	10	07/20/04	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	**0.88**	<0.50	**1.3**	<0.50	<0.50	<0.50	**0.70**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<1.0
P5-PH4	8	07/20/04	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.50	<0.25	<0.25	<0.25	<0.25	<0.25	<1.0	**0.40**	<0.25	<0.25	<0.25	<0.25	<0.25	**0.35**	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<2.5	<0.50
P5-PH5	4	07/20/04	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	**2.3**	<2.5	<1.3	<1.3	**1.8**	**1.7**	<1.3	<5.0	**3.9**	<1.3	**12.0**	<1.3	**3.0**	**1.7**	**2.4**	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<13.0	<2.5
P5-PH5	12	07/20/04	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.25	<0.13	<0.13	<0.13	<0.13	<0.13	<0.50	**0.23**	<0.13	**0.64**	<0.13	**0.18**	<0.13	**0.16**	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<1.3	<0.25

Notes:

VC = vinyl chloride
ACT = acetone
DCE = dichloroethene
DCM = dichloromethane (methylene chloride)
DCA = dichloroethane
TCM = trichloromethane (chloroform)
CT = carbon tetrachloride
TCE = trichlorothene
NP = naphthalene
< = analyte not detected at or above stated laboratory detection limit

PCE = tetrachloroethene
DCB = dichlorobenzene
DCPA = dichloropropane
DCPE = dichloropropene
TCA = trichloroethane
MEK = 2-butanone
MIBK = 4-methyl-2-pentanone
VOCs = volatile organic compounds
mg/kg = milligrams per kilogram

Table 4
Soil Analytical Results - SVOCs (mg/kg)
Georgia Pacific
Fort Bragg, California

Sample ID	Depth (ft.)	Date	1,2,4-Trichloro-benzene	1,2-DCB	1,3-DCB	1,4-DCB	2,4,5-Trichloro phenol	2,4,6-Trichloro phenol	2,4-Dichlorop henol	2,4-Dimethyl phenol	2,4-Dinitroph enol	2,4-Dinitrotol uene	2,6-Dinitrotol uene	2-Chlorona phthalene	2-Chloroph enol	2-Methylna phthalene	2-Methylph enol	2-Nitroanili ne	2-Nitrophen ol	3,3´-Dichlorob enzidine	3-,4-Methylph enol	3-Nitroanili ne	4,6-Dinitro-2-methylph enol	4-Bromoph enyl phenyl ether	4-Chloro-3-methylph enol	4-Chloroani line	4-Chloroph enyl phenyl ether	4-Nitroanili ne	4-Nitrophen ol	Acenapht hylene	Acenapht hene	Anthrace ne	Azobenze n	Benzoic Acid	Benzo(a) anthrace ne	Benzo(b)f luoranthe ne	Benzo(k)f luoranthe ne	Benzo(a) pyrene
P4-38	0.5	07/20/04	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<1.7	<0.34	<0.34	<0.34	<0.34	<0.067	<0.34	<0.67	<0.67	<0.67	<0.34	<0.67	<1.7	<0.34	<0.34	<0.34	<0.34	<0.67	<0.67	<0.067	<0.067	<0.067	<0.34	<1.7	<0.067	**0.12**	<0.067	<0.067
P4-38	2.5	07/20/04	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<1.7	<0.34	<0.34	<0.34	<0.34	<0.067	<0.34	<0.67	<0.67	<0.67	<0.34	<0.67	<1.7	<0.34	<0.34	<0.34	<0.34	<0.67	<0.67	<0.067	<0.067	<0.067	<0.34	<1.7	<0.067	<0.067	<0.067	<0.067
P4-39	0.5	07/20/04	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<1.6	<0.33	<0.33	<0.33	<0.33	<0.066	<0.33	<0.66	<0.66	<0.66	<0.33	<0.66	<1.6	<0.33	<0.33	<0.33	<0.33	<0.66	<0.66	<0.066	<0.066	<0.066	<0.33	<1.6	<0.066	<0.066	<0.066	<0.066
P4-40	1	07/20/04	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<1.7	<0.34	<0.34	<0.34	<0.34	<0.067	<0.34	<0.67	<0.67	<0.67	<0.34	<0.67	<1.7	<0.34	<0.34	<0.34	<0.34	<0.67	<0.67	<0.067	<0.067	<0.067	<0.34	<1.7	<0.067	<0.067	<0.067	<0.067
P4-41	0.5	07/20/04	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<1.7	<0.34	<0.34	<0.34	<0.34	<0.068	<0.34	<0.68	<0.68	<0.68	<0.34	<0.68	<1.7	<0.34	<0.34	<0.34	<0.34	<0.68	<0.68	<0.068	<0.068	<0.068	<0.34	<1.7	<0.068	**0.11**	<0.068	<0.068
P6-PH3	1.5	07/21/04	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<1.6	<0.33	<0.33	<0.33	<0.33	<0.066	<0.33	<0.66	<0.66	<0.66	<0.33	<0.66	<1.6	<0.33	<0.33	<0.33	<0.33	<0.66	<0.66	<0.066	<0.066	<0.066	<0.33	<1.6	<0.066	<0.066	<0.066	<0.066
P6-PH3	8	07/21/04	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<1.7	<0.33	<0.33	<0.33	<0.33	<0.067	<0.33	<0.67	<0.67	<0.67	<0.33	<0.67	<1.7	<0.33	<0.33	<0.33	<0.33	<0.67	<0.67	<0.067	<0.067	<0.067	<0.33	<1.7	<0.067	<0.067	<0.067	<0.067

Table 4
Soil Analytical Results - SVOCs (mg/kg)
Georgia Pacific
Fort Bragg, California

Sample ID	Depth (ft.)	Date	Benzo(g,h,i)perylene	Benzyl alcohol	Bis(2-chloroethoxy)methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl)ether	Bis(2-ethylhexyl)phthalate	Butyl benzyl phthalate	Chrysene	Dibenz(a,h)anthracene	Di-n-butyl phthalate	Di-n-octyl phthalate	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachloro-butadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	Naphthalene	N-Nitrosodi-n-propylamine	N-Nitrosodiphenylamine	Nitrobenzene	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
P4-38	0.5	07/20/04	<0.067	<0.34	<0.34	<0.34	<0.34	**1.4**	**0.38**	<0.067	<0.067	<0.34	<0.34	<0.34	<0.34	<0.34	<0.067	<0.067	<0.34	<0.34	<1.7	<0.34	<0.067	<0.34	<0.067	<0.34	<0.34	<0.34	<0.67	<0.067	<0.34	<0.067
P4-38	2.5	07/20/04	<0.067	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.067	<0.067	<0.34	<0.34	<0.34	<0.34	<0.34	<0.067	<0.067	<0.34	<0.34	<1.7	<0.34	<0.067	<0.34	<0.067	<0.34	<0.34	<0.34	<0.67	<0.067	<0.34	<0.067
P4-39	0.5	07/20/04	<0.066	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.066	<0.066	<0.33	<0.33	<0.33	<0.33	<0.33	<0.066	<0.066	<0.33	<0.33	<1.6	<0.33	<0.066	<0.33	<0.066	<0.33	<0.33	<0.33	<0.66	<0.066	<0.33	<0.066
P4-40	1	07/20/04	<0.067	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.067	<0.067	<0.34	<0.34	<0.34	<0.34	<0.34	<0.067	<0.067	<0.34	<0.34	<1.7	<0.34	<0.067	<0.34	<0.067	<0.34	<0.34	<0.34	<0.67	<0.067	<0.34	<0.067
P4-41	0.5	07/20/04	<0.068	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.068	<0.068	<0.34	<0.34	<0.34	<0.34	<0.34	<0.068	<0.068	<0.34	<0.34	<1.7	<0.34	<0.068	<0.34	<0.068	<0.34	<0.34	<0.34	<0.68	<0.068	<0.34	<0.068
P6-PH3	1.5	07/21/04	<0.066	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.066	<0.066	<0.33	<0.33	<0.33	<0.33	<0.33	<0.066	<0.066	<0.33	<0.33	<1.6	<0.33	<0.066	<0.33	<0.066	<0.33	<0.33	<0.33	<0.66	<0.066	<0.33	<0.066
P6-PH3	8	07/21/04	<0.067	<0.33	<0.33	<0.33	<0.33	<0.33	<0.33	<0.067	<0.067	<0.33	<0.33	<0.33	<0.33	<0.33	<0.067	<0.067	<0.33	<0.33	<1.7	<0.33	<0.067	<0.33	<0.067	<0.33	<0.33	<0.33	<0.67	<0.067	<0.33	<0.067

Notes:
SVOCs = semivolatile organic compounds
mg/kg = milligrams per kilogram
< = analyte not detected at or above stated laboratory detection limit

Table 5
Soil Analytical Results - CAM 17 Metals (mg/kg)
Georgia Pacific
Fort Bragg, California

Sample ID	Depth (ft.)	Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
P4-38	0.5	07/20/04	<3.3	7.5	140	0.53	2.5	41	55	190	19	0.19	3.2	32	0.83	12	<0.27	47	130
P4-38	2.5	07/20/04	<2.8	5.1	95	0.60	0.79	26	21	58	16	0.059	1.0	19	0.70	1.1	<0.24	50	76
P4-39	0.5	07/20/04	<2.1	2.8	820	0.26	1.3	21	6.8	35	21	0.042	0.74	20	0.30	<0.18	<0.18	35	57
P4-40	1	07/20/04	4.9	4.7	3,400	0.22	2.8	17	4.6	110	400	0.060	<0.95	29	<0.24	<0.24	<0.24	21	510
P4-41	0.5	07/20/04	<2.5	2.4	51	0.10	<0.20	9.0	2.1	10	8.7	0.091	9.8	5.7	0.25	<0.20	<0.20	9.8	27
P6-PH3	1.5	07/21/04	<3.2	3.8	72	0.29	<0.26	32	6.7	26	7.0	0.038	3.1	20	<0.26	<0.26	<0.26	33	41
P6-PH3	8	07/21/04	<2.7	21	36	0.30	<0.23	15	4.6	1.9	2.3	0.019	<0.90	14	<0.23	<0.23	<0.23	18	14

notes:

mg/kg = milligrams per kilogram
< = analyte not detected at or above stated laboratory detection limit

Table 6
Soil Analytical Results - PCBs (mg/kg)
Georgia Pacific
Fort Bragg, California

Sample ID	Detph (ft.)	Date	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260
P4-38	0.5	07/20/04	<0.0098	<0.020	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098
P4-38	2.5	07/20/04	<0.0097	<0.019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097
P4-39	0.5	07/20/04	<0.0097	<0.019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097
P4-40	1	07/20/04	<0.0098	<0.020	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098
P4-41	0.5	07/20/04	<0.0098	<0.020	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098
P6-PH3	1.5	07/21/04	<0.0097	<0.019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097
P6-PH3	8	07/21/04	<0.0096	<0.019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096

notes:

PCBs = polychlorinated biphenyls
mg/kg = milligrams per kilogram
< = analyte not detected at or above stated laboratory detection limit

Table 7
Soil Analytical Results - Tebuthiuron and Atrazine (ug/g)
Georgia Pacific
Fort Bragg, California

Sample ID	Depth (ft.)	Date	Tebuthiuron	Atrazine
P9-20	0.5	07/20/04	<0.20	<1.0
P9-20	4	07/20/04	<1.0	<1.0
P9-21	0.5	07/20/04	<2.0	<1.0
P9-21	4	07/20/04	<0.50	<1.0
P9-22	0.5	07/20/04	<0.20	<1.0
P9-22	4	07/20/04	<1.2	<1.0

Notes:

ug/g = micrograms per grams

< = analyte not detected at or above stated laboratory detection limit